

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of the Commission's Rules with)	GN Docket No. 12-354
Regard to Commercial Operations in the 3550-)	
3650 MHz Band)	
)	
Petition for Rulemaking of CTIA)	RM-11788
)	
Petition for Rulemaking of T-Mobile)	RM-11789
)	

COMMENTS OF CTIA

CTIA¹ submits these comments in response to the Wireless Telecommunications Bureau (“Bureau”) and Office of Engineering and Technology (“OET”) Public Notice seeking comments on Petitions for Rulemaking filed by CTIA and T-Mobile requesting changes to the rules governing the Citizens Broadband Radio Service in the 3550-3700 MHz (“3.5 GHz”) band.² The Commission should act swiftly to revise the Priority Access License (“PAL”) framework as proposed by CTIA and to modify the emission limits in light of the developing opportunity for 5G in the 3.5 GHz band.

¹ CTIA® (www.ctia.org) represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead a 21st century connected life. The association’s members include wireless carriers, device manufacturers, suppliers as well as apps and content companies. CTIA vigorously advocates at all levels of government for policies that foster continued wireless innovation and investment. The association also coordinates the industry’s voluntary best practices, hosts educational events that promote the wireless industry, and co-produces the industry’s leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, D.C.

² *Wireless Telecommunications Bureau and Office of Engineering and Technology Seek Comment on Petitions for Rulemaking Regarding the Citizens Broadband Radio Service*, DA 17-609, GN Docket No. 12-354, RM-11788, RM-11789, Public Notice (rel. June 22, 2017).

I. THE COMMISSION SHOULD ACT SWIFTLY ON CTIA’S PETITION TO PROMOTE INVESTMENT AND INNOVATION AS NATIONS ACROSS THE GLOBE IDENTIFY MID-BAND SPECTRUM FOR 5G.

CTIA applauds the Commission for its efforts to find greater wireless opportunities in mid-band spectrum. To that end, Chairman Pai has proposed a mid-band notice of inquiry for the August open meeting agenda,³ and Commissioner O’Rielly has highlighted that for next generation wireless networks, “more attention needs to be paid to the mid bands.”⁴ The 3.5 GHz band presents an important opportunity to make mid-band spectrum available and, as described in CTIA’s Petition for Rulemaking,⁵ CTIA urges the Commission to take steps to promote encourage investment in and full utilization of this band. As a start, the Commission should revise the PAL framework to foster certainty, investment, and innovation. Unfortunately, the current framework for PALs – with more than 500,000 licenses of 10 MHz each authorized on a census tract basis and three-year, nonrenewable license terms – does just the opposite.

To remove PAL investment uncertainty and advance U.S. interests in extending our global leadership in wireless from 4G to 5G, the CTIA petition urged the Commission to:

- Authorize PALs on a standard, ten-year license term with an expectation of renewal, instead of the current three-year license terms.
- Assign PALs on a Partial Economic Areas basis instead of census tracts.
- Protect CBSD registration information by eliminating the requirement that SAS Administrations make such information public.

³ *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 GHz and 24 GHz*, GN Docket no. 17-183, Notice of Inquiry, FCC-CIRC1708-04 (July 13, 2017).

⁴ Commissioner Michael O’Rielly, *A Mid-Band Spectrum Win in the Making*, FCC Blog (July 10, 2017), <https://www.fcc.gov/news-events/blog/2017/07/10/mid-band-spectrum-win-making>.

⁵ CTIA Petition for Rulemaking, GN Docket No. 12-354, (June 16, 2017).

Across the globe, nations are opening up the 3 GHz band for mobile services, especially for 5G. Brazil, the European Union, Russia, China, South Korea, and Japan have taken steps to launch mobile service in mid-band spectrum, as CTIA noted in its Petition.⁶ Other countries have also taken steps to foster 5G in the 3 GHz range. For example, Ireland recently auctioned 350 MHz of spectrum in the 3.4-3.8 GHz range, stating that the country “is at the vanguard in Europe... fully ready for any future 5G deployment.”⁷ The United Kingdom is planning to auction parts of the 3.4-3.8 GHz bands, noting that spectrum in the 3 GHz range “has been identified as central to the rollout of 5G mobile across Europe.”⁸ And Australia recently released a consultation package on next steps for the 3575-3700 MHz band, acknowledging “strong interest in the 3.6 GHz band for 5G...”⁹

To maintain global leadership in wireless, the United States should ensure that its spectrum policies foster innovation and investment. The CTIA Petition calls for policies that recalibrate the PALs framework to do just that.

II. THE COMMISSION SHOULD MODIFY EMISSION LIMITS TO FOSTER WIDER CHANNELIZATION AND NEW PRODUCTS IN THE 3.5 GHZ BAND.

Rapid technological development since the Commission adopted the *3.5 GHz Order* two years ago has evolved current thinking about the 3 GHz band, with a shift in focus from a novel

⁶ See CTIA Petition for Rulemaking, at 5.

⁷ Commission for Communications Regulation, *Results of the 3.6 GHz Band Spectrum Award*, ComReg 17/38 (May 22, 2017), https://www.comreg.ie/media/dlm_uploads/2017/05/ComReg-1738.pdf.

⁸ Ofcom, Ofcom Sets Rules for Mobile Spectrum Auction (Jul. 11, 2017), <https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/ofcom-sets-rules-for-mobile-spectrum-auction>.

⁹ Australian Communications and Media Authority, Australia’s Approach to the 3.6 GHz Band (Jun. 23, 2017), <http://www.acma.gov.au/theACMA/australias-approach-to-the-36-ghz-band>.

small cell play to an important mid-band opportunity for 5G. Some 5G solutions will benefit from wider channelization, which will in turn benefit from higher emission limits. The Commission should re-open the emission limits and consider how best to introduce the development of new technologies in the 3.5 GHz band.

In the *3.5 GHz Order*, the Commission recognized that emission limits should account for the technologies to be deployed – and the promise of 5G dictates higher emission limits. The Commission explained that its approach to emission limits “must be balanced and sufficiently stringent to ensure that spectrum sharing between diverse radio services and license types will work,” but that they should also “address a wide range of technologies, standards, and radio types ... without being excessively complicated or stifling innovation.”¹⁰ At the time, the Commission acknowledged that the limits it adopted were more stringent than proposed in the FNPRM, but stated that the limits were “consistent with the capabilities of the equipment and services likely to be deployed in the band.”¹¹

Today, the type of equipment and services that providers will likely deploy in the 3.5 GHz band has expanded since the *Order* was adopted in 2015. Indeed, neither the *3.5 GHz Order* nor the FCC’s 2016 reconsideration order considered or addressed 5G technologies in the band.¹² Now is the time to adjust the balance adopted in the *Order* and amend the rules to ensure that new and innovative 5G equipment and technologies will not be precluded by outdated regulatory restrictions.

¹⁰ Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, Report and Order, 30 FCC Rcd 3959, 4018 ¶ 185 (2015) (“3.5 GHz Order”).

¹¹ *Id.* at 4018 ¶ 184.

¹² See *3.5 GHz Order*; Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, Order on Reconsideration and Second Report and Order, 31 FCC Rcd 5011 (2016).

III. CONCLUSION.

For the reasons set forth above, the Commission should revise the PAL framework for the 3.5 GHz band consistent with CTIA's Petition for Rulemaking. The Commission should also revise the emission limits to allow for the wider channelization that some 5G services will require.

Respectfully submitted,

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